#### ADDENDUM NUMBER FOUR

# DUPONT PUMP STATION AND BASIN IMPROVEMENTS – PHASE 2 W-12-026-202

#### CITY OF CHATTANOOGA, TENNESSEE

The following changes shall be made to the Contract Documents, Specifications, and Drawings:

#### I. CONTRACT DOCUMENT

- Section 07 10 00 Dampproofing (attached) is added to the specifications.
- Sheet CD-7 Add the following note to Detail E: "1. Bio-retention soil mixture shall be a well-blended mixture comprised of 65% sand in accordance with ASTM C33 aggregate, 25% fines, and 10% organic compost."
- In Section 40 05 50, Paragraph 3.04.A, revise the 2nd row of Table 1 to:

16" PV 1010 1-4 &	5/PV 105	Wet Weather PS FM;	Electric
16" PV 2010	Diesel Back-Up Pump FM		

#### **Q&A/COMMENTS**

1. General Conditions, Article 6.06.J requires a minimum of 50% of onsite labor to be performed by the Contractor's own employees. This may be difficult to achieve due to the significant amount of work that will be performed by specialty subcontractors--deep foundations, prestressed concrete tank, etc. Please advise if this requirement can be waived or reduced to a smaller percentage.

Response: The City is willing to relax this requirement to a minimum of 25% of onsite labor being performed by the Contractor's own employees.

2. Please provide hourly wage rate and fringe benefit information for: painters, EIFS installers, sheet metal workers, HVAC workers, roofers, carpenters, and formsetters.

Response: A request for additional classifications and rates will be made to the U.S.

Department of Labor once a Contractor has been awarded this project. The following may be used as a guide of potential expected rates:

Classification	Wage Rate	Fringe Benefit Payment
Painter	\$14.90	\$5.40
EIFS Installer	\$25.50	\$14.20
Sheet Metal Worker	\$25.50	\$14.20
HVAC Worker	\$25.50	\$14.20
Roofer	\$14.90	\$5.40
Carpenter	\$14.90	\$5.40
Form Setter	\$14.90	\$5.40
Plasterer	\$14.90	\$5.40
Pipe Fitter	\$27.80	\$10.63

3. Please provide hourly wage rate and fringe benefit information for: plasterers, pipefitters.

Response: See response to Question #2.

4. Based on the grades shown on the plans, an estimated 600 truckloads of fill material will need to be imported to the site. Are the city streets in the area capable of handling this amount of truck traffic? Will the contractor need to factor into their bid repair of existing streets when damaged?

Response: Bidders should assume in their bid that repair of the residential streets immediately adjacent to the project site will be necessary following construction. Bidders may state what assumptions they used in preparation of a cost for this item.

5. Quick question regarding the Tank Specification document (Section 43 41 63 – Wire Wrapped Prestressed Concrete Tanks):

Section 1.06.A.1.c of the Tank Specification provides a maximum pile spacing for interior and perimeter piles based on a 100-ton-capacity pile. If the Tank Manufacturer's foundation designer opts for larger capacity piles, will there be a restriction on pile spacing or will the spacing be left up to the foundation designer?

Response: The tank manufacturer's foundation design engineer is responsible to determine the final pile design capacity and spacing. The maximum pile spacing specified in the Contract Documents is based upon the pile capacity and the minimum slab thickness specified such that the pile cap can span between piles. If a greater pile spacing is proposed by the foundation designer, we would anticipate that the slab thickness and reinforcement may increase.

6. Referencing spec section 033500.3.04.B.9 the off-form finish for the concrete is to receive damproofing. In section 0335001.02E the damproofing is included in spec section 071000, this section is not included in the bidding documents. Please advise as to the damproofing requirements for the cast-in-place concrete.

Response: See Contract Document change above.

7. On sheet CD-7, Detail E includes a 12" layer of bio-retention soil mixture. Please provide the details (components and percentages) of this soil mixture.

Response: See Contract Document change above.

8. Section 26 00 01, 1.01 C 2, states that the existing electrical equipment to be included in the study. Can you provide an existing one line so we know what to bid for the study?

Response: Only new equipment is to be included in the study.

9.

AD3-2 C05034

The bypass pumps for this application will need to be installed in a residential area. Will critically silenced units be required to limit noise from the diesel engines? The pumps required on this project will produce a good bit of noise if they are not Critically Silenced.

Response: Refer to Specification Section 01 13 10, Paragraph 1.08.A for noise limitations.

10. Spec 1.03 E states to discharge to MH S118E097, but this MH looks like it will require replacement as well. This will cause us to discharge to a MH further down stream to MH S118E053. Will this be allowed?

Response: Yes. See response to Question #42 on Addendum 3.

11. Reference specification 31 23 33-3.06.C, drawing CD-1, Note 6 & 13. The drawing notes seem to be in conflict. The specification and drawing Note 6 seem to want to push the cost of remediating "unsuitable material" onto the contractor regardless of what is encountered, while Note 13 tries to quantify an amount to be included in the contractor's bid. If "unsuitable" bedding material is a concern, please consider adding "unit price bid items" to the bid form to deal with these materials. This will put all contractors on a level playing field.

Response: Note 6 on CD-1 applies to building and structures while Note 13 applies to pipelines.

12. Please reference specification 40 05 50-3.04, drawing sheet M-4 & M-5, and Addendum 3 page AD3-2 bullet point 3. The specification requires five each 16" plug valves w/ manual hand wheel operators at the wet weather pump station forcemain discharge. The referenced drawings pictorially show four each 16" plug valves with manual hand wheel operators but they are described as motor operated. Addendum 3 changed the valve I.D. nomenclature but did not change anything regarding operator (noted actuator remains motor operated). Please clarify valve quantity and actuator type on these 16" plug valves at the Wet Weather PS.

Response: There are four 16" plug valves located on the discharge piping at the Wet-Weather Pump Station and one 16" plug valve located on the discharge piping of the diesel back-up pump as shown on the drawings. See contract revision above for specification change.

13. Reference drawing M-6 & Section 1, M-7. Please clarify the extent of the piping that is stubbed out for future jet mix pumps. The section indicates the pipe extends to a blind flange above grade, but the plan view says this piping is future. I assume the ductile iron pipe inside & under the structure is installed with encasement in this contract, but where is the line to be capped/plugged?

Response: Per Section 1/ M-7, the 18-inch ductile iron pipe once extended 16-ft from the tank footing shall include a 90-degree bend and extend to a blind flange 6-inch above grade.

June 9, 2017

Justin C Holland, Administrator City of Chattanooga

# PART 1 GENERAL

### 1.01 SCOPE OF WORK

A. Furnish all materials, labor, equipment and incidentals required and perform all the dampproofing and related work necessary for the proper completion of the Project as shown on drawings and as specified herein.

### 1.02 RELATED WORK

- A. Concrete joints and joint accessories including sealant for concrete joints are included in Division 03.
- B. Cast-in-place concrete is included in Division 03.
- C. Patching and repairs of concrete surfaces, including removal of fins and other projections, filling recesses left by the removal of form ties, and patching of surface defects and honeycombed areas, is provided under Division 03.

# 1.03 SUBMITTALS

A. Submit, in accordance with Section 01 30 00, shop drawings and product data showing materials of construction, details, and manufacturer's recommendations for installation of all required products and systems.

### B. Samples

1. Submit two representative samples of proposed materials a minimum of 90 days prior to use of the materials at the site.

### 1.04 QUALITY ASSURANCE

A. Verify, at the site, both the dimensions and work of other trades adjoining items of Work in this Section before installation of the materials specified under this Section.

# 1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver and store packaged materials in original packages. Protect from damage from sunlight, weather, extreme temperatures, and in accordance with manufacturer's recommendations.
- B. Replace packages or materials showing evidence of damage or inclusion of foreign material at no additional cost to the OWNER.

### 1.06 PROJECT/SITE REQUIREMENTS

- A. Perform work only when existing and forecasted weather conditions are within the limits, including temperature limits, established by the manufacturer of the materials and products used.
- B. Proceed with installation only when substrate construction and preparation work is complete and in condition to receive the materials and products used, as specified in Paragraph 3.01.

# 1.07 APPLICATION SCHEDULE

A. Dampproof the surfaces of all poured in place concrete walls, which are in contact with soil from the top of the footings up to 6-in below finished grade or to bottom of slab. Carry dampproofing over exposed top and outside edge of footings. Provide also on buried top slabs of structures without waterproofing protection.

### PART 2 PRODUCTS

### 2.01 MATERIALS

#### A. Dampproofing

 Troweled dampproofing shall be an asphalt emulsion reinforced with fibers conforming to ASTM D1227, Type II, Class 1. The dampproofing shall be Hydrocide 700 by Sonneborn Building Products, Division of ChemRex Inc., Minneapolis, MN; Karnak 920 Asphalt Emulsion by Karnak Corporation, Clark, NJ or equal.

# PART 3 EXECUTION

### 3.01 INSTALLATION

A. Installation of materials specified under this Section shall not commence until the structure has passed the watertightness test specified elsewhere in these documents, where applicable.

#### B. Installation of Dampproofing

- 1. Surface to be treated shall be free from oil and dirt and shall be in the proper condition as indicated by the manufacturer prior to the application of the dampproofing material. The concrete shall have been completely cured and the surface shall be dry and free from frost at the time of application.
- 2. Surfaces to be troweled dampproofed shall receive one heavy coat carefully applied so that "holidays" or air-bubble depressions in the surface are completely filled and a thickness of 1/16-in is obtained from the high points of the surfaces providing a 100 percent coating of the surface. Carry coating over exposed top and outside edge of footing.

- 3. Particular care shall be given to the application of dampproofing at all construction joints which are encountered.
- 4. The coat or coats specified is in addition to primer coats as recommended by the manufacturer.
- Do not place backfill before cure time recommended by manufacturer and before the wall has been inspected by ENGINEER. The backfill shall be placed promptly after inspection by ENGINEER within time limits recommended by manufacturer.

# 3.01 CLEANUP

- A. At all times keep the premises free from accumulation of waste materials and rubbish. At the completion of the installation, remove all tools, equipment, scaffolding, surplus materials and rubbish from the area.
- B. Remove all dampproofing from all surfaces where materials are not required. Use cleaning material recommended by the manufacturer.

**END OF SECTION** 

Dampproofing

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